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|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 09/849,049 | SMITH ET AL. | |
| | Examiner | Art Unit | |
| | Ghassem Alie | 3724 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS**. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 02/13/07 and an interview conducted on 04/25/07.
2. The allowed claim(s) is/are 1-7.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>07/23/01</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date <u>04/25/07</u> 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-7) on 02/13/07 is acknowledged. The traversal is on the ground(s) that inventions that "all claims could be examined as a whole without incurring extra-burdens upon the examiner." The argument is not persuasive. As shown in the previous Office Action mailed on 08/16/06, each individual invention with distinct features has a separate status in the art and requires a different field of search. Therefore, there is a serious burden on the Examiner to examine all distinct individual inventions in Groups I-IV together. The Search for each individual invention in Groups I-IV may overlap but they do not coincide identically throughout. Examination of all the inventions in Groups I-IV together is a serious burden on the examiner and prevents the examiner from properly examine the invention and degrades the quality of the examination. The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The amendment has been initiated to correct the minor informality in the application.

Authorization for this examiner's amendment was given in a communication with George D. Liu (47,752) on 04/25/07. The application has been amended as follows:

Art Unit: 3724

In the claims:

In claim 1, lines 9-12, “ ;and wherein each of the first and second linear transport means has three sequential points serving as a load/unload station, a vision position station, and a singulation/cutting station for the first carrier support and the second carrier support;” has been changed to

--;and wherein each of the first and second linear transport means has three sequential points separated from each other and serving as a load/unload station, a vision position station, and a singulation/cutting station for the first carrier support and the second carrier support; wherein the first and second linear actuators are parallel to one another, and each carrier support moves along the corresponding linear actuator and stops at each one of the stations;--.

Claims 8-17 have been cancelled.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance: The claim is allowable because prior art fails to teach that each carrier support moves along the corresponding linear actuator and stops at each one of the three sequential points separated from one another and serving as a load/unload station, a vision position station, and a singulation/cutting station, as set forth in claim 1.

Regarding claim 1, Ono (4,688,450) substantially teaches a cutting system for use in singulation of substrate and dicing of wafers. One also teaches that the cutting system includes a first and second linear transport mean arranged parallel to each other. Ono also teaches that each linear transport means includes a linear actuator and a carrier support

Art Unit: 3724

movable along the corresponding linear actuator. Ono also teaches that the linear transport device includes two stations three as load/unload station, a vision position station, singulation/cutting station. However, Ono does not teach that the linear transport means are arranged in a manner that each carrier support can move along its corresponding linear actuator and stops at each one of the three sequential points separated from one another and serving as a load/unload station, a vision position station, and a singulation/cutting station, as set forth in claim 1.

None of these references by themselves or in combination with the other prior art cited teach the claimed invention set forth in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3724

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

April 25, 2007



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. The amendment has been initiated to correct the minor informality in the application.

Authorization for this examiner's amendment was given in a communication with George D. Liu (47,752) on 04/25/07. The application has been amended as follows:

In the abstract:

Entire abstract has been deleted.

The abstract has been replaced with the following new abstract:

--ABSTRACT

A singulation saw for sawing either substrate or wafers includes a pair of counter-rotating saw blades mounted for independent movement in a vertical direction for alternatively engaging with a substrate to be singulated. The singulation saw further includes a transport system including a pair of substrate carriers reciprocates the substrates. While the first substrate is being cut, the second substrate or other substrate carrier sequentially unloads a cut substrate, loads a new uncut substrate and then moves the uncut substrate to a vision system for determining the position of the substrate relative to the second carrier and then positions the second carrier and its substrate in a standby position ready to be cut by the pair of saw blades that are cutting the first substrate. As the first cut substrate is moved to an unload position, the new uncut substrate is moved into a cutting position.--.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

May 3, 2007



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER